

## LIST OF SPECIES OF FISHES KNOWN TO OCCUR IN THE GREAT LAKES OR THEIR CONNECTING WATERS.

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In the following list are given the fishes known to occur in the Great Lakes or their connecting waters. This includes not only the streams and smaller lakes directly tributary to the Great Lakes but also the upper St. Lawrence River and the waters tributary to it. The species not known to occur elsewhere than in the hydrographic basin of the Great Lakes are indicated by a star.

The fish fauna of the Great Lakes is not particularly rich as to species, the number being scarcely greater than that known from the Wabash Basin. Of this list of 152 species and subspecies, only 27 are peculiar to the Great Lakes Basin.

1. *Petromyzon marinus unicolor* (De Kay). Lamprey eel.
2. \* *Ichthyomyzon concolor* (Kirtland). Silver lamprey.
3. *Lampetra wilderi* (Gage). Brook lamprey.
4. *Polyodon spathula* (Walbaum). Paddle-fish. Only one specimen recorded from Great Lakes Basin; that from Lake Erie.
5. *Acipenser rubicundus* Le S. Lake sturgeon.
6. *Lepisosteus osseus* (L.). Long-nosed gar.
7. *Lepisosteus platostomus* Rafinesque. Short-nosed gar.
8. *Amia calva* Linnaeus. Dog-fish or bowfin.
9. *Ictalurus punctatus* (Rafinesque). Channel cat-fish.
10. *Ameiurus lacustris* (Walbaum). Great Lakes cat-fish.
11. *Ameiurus natalis* (Le Sueur). Yellow cat-fish.
12. *Ameiurus vulgaris* (Thompson). Bullhead.
13. *Ameiurus nebulosus* (Le Sueur). Common bullhead.
14. *Ameiurus melas* (Rafinesque). Small black bullhead.
15. *Noturus flavus* Rafinesque. Stone cat.
16. *Schilbeodes gyrinus* (Mitchill).
17. *Schilbeodes exilis* (Nelson).
18. *Schilbeodes miurus* (Jordan).
19. \* *Carpioles thompsoni* Agassiz. Lake carp sucker.
20. *Catostomus catostomus* (Forster). Long-nosed sucker.
21. *Catostomus commersonii* (Lacépède). Common sucker.
22. *Catostomus nigricans* Le S. Black sucker.
23. *Erimyzon suetta oblongus* (Mitchill). Chub sucker.
24. *Minytrema melanops* (Raf.). Striped sucker.
25. *Moxostoma anisurum* (Rafinesque). White-nosed sucker.
26. *Moxostoma aureolum* (Le Sueur). Common redhorse.
27. *Moxostoma breviceps* (Cope). Short-headed redhorse.
28. *Campostoma anomalum* (Raf.). Stone-roller.
29. *Chromosomus erythrogaster* Rafinesque. Red-bellied dace.
30. *Pimephales promelas* Raf. Fat-head minnow.
31. *Pimephales notatus* (Rafinesque). Bluntnosed minnow.
32. *Semotilus corporalis* (Mitchill). Fall-fish.
33. *Semotilus atromaculatus* (Mitchill). Creek chub.
34. *Leuciscus elongatus* (Kirtland). Red-sided minnow.
35. *Leuciscus neogaeus* (Cope).
36. *Leuciscus marginatus* (Cope).
37. *Opsopoeodus emiliae* Hay.
38. *Opsopoeodus megalops* (Forbes).
39. *Abramis crysoleucas* (Mitchill). Roach.
40. *Hybognathus nuchale* Agassiz.
41. *Chiola vigilax* (Baird & Girard)
42. *Notropis anogenus* Forbes.
43. *Notropis cayuga* Meek. Cayuga minnow.
44. *Notropis heterodon* (Cope).
45. \* *Notropis frenetensis* (Cope).
46. *Notropis blennius* (Girard). Straw-colored minnow.
47. \* *Notropis volucellus* (Cope).
48. *Notropis hudsonius* (DeWitt Clinton). Shiner.
49. \* *Notropis hudsonius selene* (Jordan). Lake Superior shiner.
50. *Notropis whipplii* (Girard). Satin-fin minnow.
51. *Notropis cornutus* (Mitchill). Red-fin.
52. \* *Notropis cornutus frontalis* (Agassiz).
53. \* *Notropis cornutus cyaneus* (Cope).
54. *Notropis atherinoides* Rafinesque.
55. *Notropis arge* (Cope).
56. *Notropis rubrifrons* (Cope).
57. *Notropis umbratilis* (Girard).
58. *Notropis umbratilis cyanocephalus* (Cope-land).

59. *Ericymba buccata* (Cope).  
 60. *Rhinichthys cataractæ* (Cuvier & Valenciennes). Long-nosed dace.  
 61. *Rhinichthys atronasus* (Mitchill). Black-nosed dace.  
 62. *Rhinichthys atronasus lunatus* (Cope).  
 63. *Hybopsis dissimilis* (Kirtland).  
 64. *Hybopsis storerianus* (Kirtland).  
 65. *Hybopsis kentuckiensis* (Raf.). River chub.  
 66. *Couesius plumbeus* (Agassiz).  
 67. *Couesius dissimilis* (Girard).  
 68. *Exoglossum maxillingua* (Le Sueur). Cutlip minnow.  
 69. *Anguilla chrysosypha* Rafinesque. Common eel.  
 70. *Hiodon alosoides* (Rafinesque). Mooneye.  
 71. *Hiodon tergisus* Le Sueur. Toothed herring.  
 72. *Dorosoma cepedianum* (Le Sueur). Hickory shad. Probably introduced through canals from Mississippi basin, and possibly also through the Erie Canal.  
 73. *Pomolobus chrysachloris* Rafinesque. Probably not native, but introduced from the Mississippi basin by means of canals.  
 74. *Pomolobus pseudoharengus* (Wilson).  
 75. *Coregonus quadrilateralis* Richardson. Round white-fish.  
 76. *Coregonus clupeiformis* (Mitchill). Common white-fish.  
 77. *Coregonus labradoricus* Richardson. Labrador white-fish.  
 78. \**Argyrosomus osmeriformis* (H. M. Smith). Smelt of New York lakes.  
 79. *Argyrosomus artedi* (Le Sueur). Lake herring.  
 80. *Argyrosomus artedi* sisco Jordan. Cisco of Lake Tippecanoe. Only in certain small lakes in Wisconsin connected with Lake Michigan and certain small lakes in northern Indiana in the Wabash basin.  
 81. \**Argyrosomus hoyi* Gill. Hoy's white-fish.  
 82. \**Argyrosomus prognathus* (H. M. Smith). Long-jaw white-fish.  
 83. \**Argyrosomus nigripinnis* Gill. Blackfin white-fish.  
 84. \**Argyrosomus tullibee* (Richardson). Tullibee white-fish.  
 85. \**Argyrosomus tullibee* bisselli Bollman.  
 86. *Cristivomer namaycush* (Walbaum). Lake trout.  
 87. \**Cristivomer namaycush* siscowet (Agassiz). Siscowet.  
 88. *Salmo salar* Linnaeus. Atlantic salmon.  
 89. *Salmo* *salar* ouananiche McCarthy. Ouana-niche.  
 90. *Salvelinus fontinalis* (Mitchill). Brook trout.  
 91. \**Thymallus tricolor* Cope. Michigan grayling.  
 92. *Umbra limi* (Kirtland). Mud minnow.  
 93. *Lucius vermiculatus* (Le Sueur). Grass pike.  
 94. *Lucius reticulatus* (Le Sueur). Pickerel.  
 95. *Lucius lucius* (Linnaeus). Great pike.  
 96. *Lucius masquinongy* (Mitchill). Muskallunge.  
 97. *Fundulus diaphanus* (Le Sueur). Grayback minnow.  
 98. *Fundulus diaphanus menona* (Jordan & Cope-land).  
 99. *Fundulus dispar* (Agassiz).  
 100. *Fundulus notatus* (Raf.). Top minnow.  
 101. *Eucalia inconstans* (Kirtland). Brook stickleback.  
 102. \**Eucalia inconstans cayuga* Jordan.  
 103. \**Eucalia inconstans pygmæa* (Agassiz).  
 104. *Pygosteus pungitius* (Linnaeus). Nine-spine stickleback.  
 105. *Gasterosteus bispinosus* (Walbaum). Common stickleback.  
 106. *Percopsis guttatus* Agassiz. Trout perch.  
 107. *Aphredoderus sayanus* (Gilliams). Pirate perch.  
 108. *Labidesthes sicculus* (Cope). Skipjack.  
 109. *Pomoxis annularis* Rafinesque. Crappie.  
 110. *Pomoxis sparoides* (Lacépède). Calico bass.  
 111. *Ambloplites rupestris* (Raf.). Rock bass.  
 112. *Chænobryttus gulosus* (Cuv. & Val.). War-mouth.  
 113. *Apomotis cyanellus* (Rafinesque). Blue-spotted sun-fish.  
 114. *Lepomismegalotis* (Rafinesque). Long-eared sun-fish.  
 115. *Lepomis pallidus* (Mitchill). Bluegill.  
 116. *Eupomotis euryorus* (McKay). Red-eared sun-fish.  
 117. *Eupomotis gibbosus* (L.). Pumpkin-seed.  
 118. *Micropterus salmoides* (Lacépède). Large-mouthed black bass.  
 119. *Micropterus dolomieu* Lacépède. Small-mouthed black bass.  
 120. *Stizostedion vitreum* (Mitchill). Wall-eyed pike.  
 121. *Stizostedion canadense* (Smith). Sauger.  
 122. *Stizostedion canadense griseum* (De Kay).  
 123. *Perca flavescens* (Mitchill). Yellow perch.  
 124. *Percina caprodes* (Rafinesque). Log perch.  
 125. *Percina caprodes zebra* (Agassiz).  
 126. *Hadropodus aspro* (Cope & Jordan). Black-sided darter.  
 127. *Cottogaster copelandi* (Jordan). Copeland's darter.  
 128. \**Cottogaster cheneyi* Evermann & Kendall. Cheney's darter.  
 129. *Cottogaster shumardi* (Girard). Darter.  
 130. *Diplesion blennioides* (Rafinesque). Green-sided darter.  
 131. *Boleosoma nigrum* (Rafinesque). Johnny darter.  
 132. *Boleosoma nigrum olmstedi* (Storer). Darter.  
 133. *Ammocrypta pellucida* (Baird). Sand darter.  
 134. \**Etheostoma boreale* (Jordan). Northern darter.  
 135. *Etheostoma coeruleum* Storer. Rainbow darter.  
 136. *Etheostoma flabellare* Raf. Fan-tailed darter.  
 137. *Etheostoma flabellare lineolatum* (Agassiz).  
 138. *Boleichthys fusiformis* (Girard).  
 139. *Microperca punctulata* Putnam. Least darter.  
 140. *Roccus chrysops* (Raf.). White lake bass.  
 141. *Aplodinotus grunniens* Rafinesque. Fresh-water drum.  
 142. *Cottus ictalops* (Rafinesque). Blob.  
 143. \**Cottus ricei* Nelson. Rice's blob.  
 144. \**Cottus pollicaris* (Jordan & Gilbert).  
 145. \**Cottus spilotus* (Cope).  
 146. \**Uranidea franklini* (Agassiz).  
 147. \**Uranidea kumlienii* Hoy.  
 148. *Uranidea gracilis* (Heckel).  
 149. \**Uranidea formosa* (Girard).  
 150. \**Uranidea hoyi* Putnam.  
 151. \**Triglopsis thompsoni* Girard. Fresh-water sculpin.  
 152. *Lota maculosa* (Le Sueur). Ling.